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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,906	09/22/2003	Hironao Minato	2038-221A	6809
7590 12/07/2005			EXAMINER	
LOWE HAUPTMAN GILMAN & BERNER, LLP			REICHLE, KARIN M	
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1700 Diagonal Road			PAPER NUMBER	
Alexandria, VA 22314			3761	

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Please find below and/or attached an Office communication concerning this application or proceeding.

6

Office Action Summary	Application No. 10/664,906	Applicant(s) MINATO ET AL.	
	Examiner Karin M. Reichle	Art Unit 3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/220,889.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9-22-03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The substitute specification filed 9-22-03 has been entered.

Priority

2. The status of the parent application in the cross-reference on page 1, first full paragraph, should be updated.

Oath/Declaration

3. It is noted that the Supplemental Declaration filed in the parent application has not been made of record in this application.

Specification

Drawings

4. The drawings were received on 9-22-03. These drawings are approved by the Examiner.
5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the invention as claimed in claims 9-10, e.g., the second to last section of claim 9, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing

Art Unit: 3761

sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Description

6. The disclosure is objected to because of the following informalities: The Summary of the Invention section, i.e. a description of the claimed invention, and the invention of the claims is not commensurate, see MPEP 608.01(d), see, e.g., paragraph 10, where is this claimed in the claims? In paragraph 23, line 4, “sheet” should be --sheets--. In paragraph 28, line 11, after “restores”, --to-- should be inserted. Also, throughout the substitute specification, the words on various lines, e.g. the first two lines of paragraph 28, all run together, i.e. no spaces therebetween. On line 20 of paragraph 28, the text starting “With such...” should be a separate paragraph, note the originally filed specification. On line 26 of paragraph 28, “into” should be --to--. On line 3 of paragraph 29, after “except”, --as to-- should be inserted. In the abstract, lines

Art Unit: 3761

6 and 9, "cuff" should be --cuffs--. Also it is noted that the last sentence of the abstract is drawn to an invention not claimed in the claims in this application.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. Claims 5-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In the last section of claim 5, it is set forth that the backsheet terminates beneath the inner side edge of the barrier cuff which side edge is bonded to the side flap, see also lines 14-16 of claim 5, yet lines 4-6 of claim 5 only require flaps formed by at least the topsheet extending outwardly from the edges of the core, i.e. the backsheet is not required to form the flaps. It is unclear how the backsheet can terminate beneath the inner side edge but not necessarily extend outward from the edges of the core. A clear description of the backsheet with regard to the side flap should be set forth. Similarly, with regard to claim 9, the second to last section requires that the topsheet does not extend into the hollow spaces, i.e. can be bonded to the side flaps but not extend into the hollow space, see also lines 14-28, yet lines 4-6 of claim 5 only require the flaps formed of at least the backsheet outwardly of the edges of the core, i.e. the topsheet is not required to form the flaps. It is unclear what the minimum lateral extension of the topsheet is being claimed, i.e. the side edges of the core or the inner edge of the hollow space? A clear description of the topsheet with regard to the side flap should also be set forth. Also, in the last

Art Unit: 3761

line of claim 5, is the outer edge attached to the barrier cuff or not, i.e. only claimed as having the capability of doing so?

Claim Language Interpretation

8. Support for the invention set forth in claims 5-10 may be found at paragraphs 29 and 30. Since no claim terminology has been specifically defined in the specification, the terminology will be interpreted according to its usual, i.e. dictionary definition. Due to the lack of clarity set forth supra, claim 5 will be interpreted as requiring the backsheet to form at least the portion of the side flap from the edge of the core to the position where the inner side edge of the barrier cuff is attached to the side flap and the outer edge to be attached to the flap. Due to the lack of clarity set forth supra, claim 9 will be interpreted as requiring the topsheet extend no further than the inner edge of the hollow space. The terminology "bonded" is interpreted to include either direct or indirect bonding.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sauer '213 in view of Sageser '803.

See Claim Language interpretation section supra, Figures 1-2 and 5, col. 3, lines 16-col. 5, line 22, col. 5, line 56-col. 6, line 31 and col. 7, line 24-col. 8, line 15 of Sauer, i.e. '213 teaches a disposable diaper comprising a liquid-permeable topsheet 14, a liquid-impermeable backsheet 22, a liquid-absorbent core 30 disposed therebetween so as to form a front waist region adjacent 20, a rear waist region adjacent 18 and a crotch region extending therebetween, longitudinally opposite front and rear end flaps, see Figure 1, transversely opposite side flaps which are formed by at least said backsheet extending outward from peripheral edges of said absorbent core, see Figures 2 and 5 and first full paragraph of col. 4, a pair of barrier cuffs 10, 16 being elastically extendable in a longitudinal direction of said diaper, and being bonded, see Claim Language interpretation section supra, in an extended condition, to an inner surface of an associated one of said side flaps, see last full sentence of col. 3, the first full paragraph of col. 4, Figures 2-5 and col. 6, lines 30-31, each of said barrier cuffs having longitudinally opposite front and rear ends, and inner and outer side edges extending in parallel to each other between said front and rear ends, see Figures, said front and rear ends of each of said barrier cuffs being respectively bonded to said front and rear end flaps, see col. 7, lines 32-38, each of said barrier cuffs has, in said crotch region, the outer side edge 36 bonded to said associated side flap and said inner side edge 23 bonded to said associated side flap along a line defined between said outer side edge and an associated edge of said absorbent core (It is noted that the claim does not require direct bonding of the inner edge to the flap nor direct bonding only), each of said barrier cuffs has, in a transverse cross-sectional view and in the crotch region, a first wall section 16 which extends inwardly from the outer side edge of said barrier cuff, a second wall section 10 intersecting the first wall section at the distal edge thereof and extending downward to the inner

Art Unit: 3761

side edge of said barrier cuff (It is noted that the claim does not require the first wall section and second wall section only intersect at a particular portion), a dimension of said first wall section in a transverse direction thereof is larger than that of said second wall section in said transverse direction, said first and second wall sections, together with a portion of said associated side flap defined between said outer and inner side edges, describe a hollow space of a substantially triangular shape, under contraction of said barrier cuff in the longitudinal direction, see Figures 2 and 5, portions of said barrier cuffs and said side flaps participating in the formation of said triangular hollow spaces are air-permeable, see portions of '213 cited supra, said topsheet is bonded to the inner side edges of said barrier cuffs along bonding lines, see portions cited supra, and an air-permeability of said backsheet in portions thereof participating in the formation of said hollow spaces is about same as in a remainder of said backsheet which does not participate in the formation of said hollow spaces, see portions cited supra. The claim further requires 1) the first wall section formed with a plurality of elastic members, the second wall section intersecting the first wall section inwardly of the innermost one of the elastic members and the outermost one of the elastic members being spaced and distinct from the bonding of the other side edge of the cuff and the side flap, and 2) the topsheet terminated at the bonding lines without extending into the hollow spaces. With regard to 1), the claim language does not require the elastic members be directly formed on the first wall section or directly formed on just the first wall section.

Therefore it is the Examiner's first position that the structure shown in Figure 5 of Sauer reads on the claim language. In any case, Figure 5 of Sauer shows the elastic members indirectly formed on the first wall section and directly formed within a folded over portion of the second wall section. See also Figures 6 and 2 of Sageaser '803, elastic members indirectly formed on a

Art Unit: 3761

first wall section and directly formed within a folded over portion of the second wall section interchangeable with elastic members directly formed on the first wall section. Therefore to make the elastic members indirectly formed on the first wall section of Sauer '213 elastic members directly formed on the first wall section instead would be obvious in view of the interchangeability as taught by Sageaser '803. With respect to 2), see Figure 5 which shows the topsheet bonded to the inner side edges of the barrier cuffs along bonding lines and the topsheet with respect to the side edges of the core and the side flaps which extend outwardly from such side edges and col. 4, lines 6-11. While it is clear Sauer contemplates side flaps not including the topsheet, i.e. the topsheet does not extend into the hollow spaces, Sauer does not clearly teach the topsheet terminating at the lines at which it is bonded, directly or indirectly, to the barrier cuffs. However see again Sageaser at Figure 2 and then Figure 4, i.e. a topsheet coextensive with a backsheet interchangeable with a topsheet which is bonded at its terminal edge at the core side edge and a backsheet which forms a side flap. Therefore to make the topsheet coextensive with the backsheet of Sauer a topsheet which is bonded at its terminal edge at the core side edge and a backsheet which forms a side flap instead would be obvious in view of the interchangeability as taught by Sageaser as well as the desire of '213 set forth at col. 4, lines 6-11. In so doing the topsheet of the prior art would terminate at the bonding lines with the barrier cuffs as claimed.

11. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sauer '213 in Suzuki et al '261 and '432, alone, or in view of Suzuki et al, '261 and 432, and Sageaser '803.

With regard to claims 5-6, except for the last section of claim 5 and claim 6, see the discussion of claim 9 supra with regard to what '213 teaches and 1) and note as well Figures and

Art Unit: 3761

5 of '213 which show the flaps 28 formed by the topsheet extending outwardly from the edges of the core 30. In contrast to claim 9, rather than item 2) discussed supra, claims 5 and 6 require that one longitudinal edge of the backsheet terminates beneath the inner side edge of one of the cuffs and is adhesively attached to an extension sheet, of an air permeability higher than that of the back sheet, having an inner edge at the area of attachment and an outer edge and the sheet extending transversely from the inner edge outward for attachment to the barrier cuff at the outer edge. See Figure 5 which shows the backsheet underlying the inner side edges of the barrier cuffs where the side edges of the core and the side flaps which extend outwardly from such side edges meet and col. 4, lines 6-11. While it is clear Sauer contemplates side flaps not including the backsheet, i.e. the backsheet does not extend past the core side edges, i.e. terminates under the inner edges of the barrier cuffs, contemplates leg cuffs formed from separate materials, i.e. an extension sheet, attached thereto and teaches a backsheet of liquid and vapor impermeable material or liquid impermeable but vapor permeable material or being liquid impermeable beneath the core but not in the flaps, Sauer does not clearly teach the separate material/extension sheet adhesively attached to the terminal edge of the backsheet at an inner edge and an outer edge extending outwardly therefrom and attached to the barrier cuff and having a vapor/air permeability higher than that of the backsheet. However, see, for example, Suzuki et al, '261 and '432, which teach it is well known to attach, e.g. by adhesive, the inner edge of a vapor permeable separate material/extension sheet which forms the flaps to the terminal edge of a backsheet which is liquid impermeable and may/may not be vapor impermeable. Therefore, to make the separate material attached to the backsheet of Sauer '213 air permeable while the backsheet which lies adjacent the core vapor impermeable and attach the separate material by

Art Unit: 3761

adhesively attaching an inner edge to the terminal edge of the backsheet and the separate sheet extending transversely outward therefrom to an outer edge which forms the outer edge of the flap, if not already, would be obvious to one of ordinary skill in the art in view of the recognition that such is an well known configuration as taught by Suzuki et al for creating a outer surface which is liquid and vapor impermeable adjacent the core but liquid impermeable and vapor permeable in the flaps and for creating flaps of separate materials attached to a backsheet adjacent the core and the contemplation of Sauer to employ such features. In so doing, the backsheet and separate material/extension sheet would include the structure of the last section of claim 5 and claim 6.

12. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sauer '213 in Suzuki et al '261 and '432, alone, or in view of Suzuki et al, '261 and 432, and Sageser '803 as applied to claim 5 above, and further in view of Pieniak et al.

Applicant claims the plurality of elastic members includes at least three elastic members with the innermost of such having a lesser extension stress than that of the outermost elastic member and the member or members therebetween having the same or lesser extension stress than the innermost member. Note again the discussion of the elastic members with regard to claims 9 and 5 supra and Figure 5 and the paragraph bridging cols. 3-4 and col. 7, lines 32-38 of '213, i.e. multiple elastic members 24 can be distributed over the width of wall section 10 and thus also at the ends of the wall section 16. '213 provides such wall sections to fit the diaper to the user and decrease the possibility of leakage. See also Pieniak '694 at the Figures and col. 5, line 25-col. 7, line 2, i.e. having the elastic element closest to the flap with a greater extension stress than the other innermore members provides better fit and containment but remains

Art Unit: 3761

comfortable due to the lower stress inwardly thereof. Therefore, to employ a greater extension stress in the outermost member and less stress in the inner more members as taught by Pieniak on the Sauer device would be obvious to one of ordinary skill in the art in view of the recognition that such would provide better fit and containment and the desire of such by Sauer while remaining comfortable and the desire of such in any diaper, i.e. a body worn device.

Allowable Subject Matter

13. The prior art references, alone or in any combination, do not teach the structure of claims 8 and 10 in combination with the structure as set forth in the claims from which they depend.

Conclusion


14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited but not applied teach various barrier cuff and/or side flap features.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karin M. Reichle whose telephone number is (571) 272-4936. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tanya Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3761

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Karin M. Reichle
Primary Examiner
Art Unit 3761

KMR
November 29, 2005